### DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133 (707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-008766 Address: 333 Burma Road **Date Inspected:** 27-Aug-2009

City: Oakland, CA 94607

**OSM Arrival Time:** 645 **Project Name:** SAS Superstructure **OSM Departure Time:** 1845 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Xu Xian Ping No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No **Weld Procedures Followed:** Yes No N/A **Qualified Welders:** Yes No N/A **Verified Joint Fit-up:** Yes No N/A N/A Yes N/A **Approved Drawings:** Yes No **Approved WPS:** No Yes No N/A **Delayed / Cancelled:** 

OBG & TOWER Components **Bridge No:** 34-0006 **Component:** 

**Summary of Items Observed:** 

On this date Caltrans OSM Quality Assurance (QA) Inspector, Sandeep Kumar was present during the times noted above for observations relative to the work being performed.

## BAY 1

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #028 located on Floor Beam FB204 – 047. Welder is identified as 216575. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B -T - 2232 - Tc - U4b - F.

FCAW process welding of weld joint #024 located on Floor Beam FB205 – 047. Welder is identified as 216575. ZPMC QC is identified as Tian Lei. The welding variables recorded by QC appeared to comply with the WPS – B -T - 2232 - Tc - U4b - F.

### BAY 2

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #004 located on Floor Beam FB3069 – 001. Welder is identified as 062438. ZPMC QC is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

## WELDING INSPECTION REPORT

(Continued Page 2 of 3)

FCAW process welding of weld joint #003 located on Floor Beam FB3073 – 003. Welder is identified as 215676. ZPMC QC is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2132 - 3.

FCAW process welding of weld joint #007 located on Floor Beam FB3069 – 001. Welder is identified as 062438. ZPMC QC is identified as Xiang Feng Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2232 - Tc - U4b - F.

FCAW process welding of weld joint #005 located on Floor Beam FB3029 – 001. Welder is identified as 045209. ZPMC QC is identified as Zhang Hai Feng. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2133.

BAY 5

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #003 located on Traveler Rail TR10A – 001. Welder is identified as 215689. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - B - U2 - F.

FCAW process welding of weld joint #004 located on Traveler Rail TR10A – 001. Welder is identified as 217185. ZPMC QC is identified as Xu Hong Min. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2231 - B - U2 - F.

BAY 6

Ultrasonic Testing

This QA inspector performed UT of approximately 10% of the area previously tested and accepted by ZPMC Quality Control personnel. This QA Inspector generated an UT report for this date. The member is identified as OBG Component. The weld designations reviewed are as follows:

- 1. BP3001-001-013; 016; 21; 33; 007; 012; 020; 040 Green Tag # 0010386
- 2. BP3002-001-013; 015; 021; 029; 007; 020; 009; 028 Green Tag # 0010385

This QA Inspector observed the following work in progress:

SMAW process welding of weld joint #7B located on WD1 – A305 – 65M – 4. Welder is identified as 037780. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS - B - T - 3212 - Tc - U5b - 1.

SMAW process welding of weld joint #44 located on WD1 – A305 – 77M – 1. Welder is identified as 069493. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS - B - T - 2112.

SMAW process welding of weld joint #1A located on WD1 – A305 – 65M – 4. Welder is identified as 066457. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the

## WELDING INSPECTION REPORT

(Continued Page 3 of 3)

WPS - B - T - 3212 - Tc - U5b - 1.

SMAW process welding of weld joint #7B located on WD1 – A305 – 65M – 1. Welder is identified as 066481. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS - B - T - 3212 - Tc - U5b - 1.

SMAW process welding of weld joint #1A located on WD1 – A305 – 65M – 1. Welder is identified as 066456. ZPMC QC is identified as Wang Xiao Bing. The welding variables recorded by QC appeared to comply with the WPS - B - T - 3212 - Tc - U5b - 1.

BAY 7

This QA Inspector observed the following work in progress:

FCAW process welding of weld joint #009 located on Deck Plate DP3011 – 001. Welder is identified as 051246. ZPMC QC is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS - B - T - 4132.

FCAW process welding of weld joint #006 located on Deck Plate DP3061 – 001. Welder is identified as 222396. ZPMC QC is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS - B - T - 4132.

FCAW process welding of weld joint #034 located on Deck Plate DP3061 – 001. Welder is identified as 051246. ZPMC QC is identified as Shen Jian Guo. The welding variables recorded by QC appeared to comply with the WPS - B - T - 4132.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

#### **Summary of Conversations:**

No Relevant Conversations.

#### **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang - 15000422372, who represents the Office of Structural Materials for your project.

Inspected By:	Kumar,Sandeep	Quality Assurance Inspector
Reviewed By:	Prue,Erik	QA Reviewer